

Product datasheet for TL503846

OriGene Technologies, Inc.

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Eif2s2 Mouse shRNA Plasmid (Locus ID 67204)

Product data:

Product Type: shRNA Plasmids

Product Name: Eif2s2 Mouse shRNA Plasmid (Locus ID 67204)

Locus ID: 67204

Synonyms: 38kDa; 2810026E11Rik; AA408636; AA571381; AA986487; AW822225; D2Ertd303e; EIF2; EIF2B

Vector: pGFP-C-shLenti (TR30023) **E. coli Selection:** Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: Eif2s2 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 67204).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: <u>BC003848</u>, <u>BC113766</u>, <u>NM 026030</u>, <u>NM 026030.1</u>, <u>NM 026030.2</u>, <u>BC100539</u>

UniProt ID: Q99L45

Summary: eIF-2 functions in the early steps of protein synthesis by forming a ternary complex with GTP

and initiator tRNA. This complex binds to a 40S ribosomal subunit, followed by mRNA binding to form a 43S preinitiation complex. Junction of the 60S ribosomal subunit to form the 80S initiation complex is preceded by hydrolysis of the GTP bound to eIF-2 and release of an eIF-2-GDP binary complex. In order for eIF-2 to recycle and catalyze another round of initiation, the GDP bound to eIF-2 must exchange with GTP by way of a reaction catalyzed by eIF-2B (By

similarity).[UniProtKB/Swiss-Prot Function]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.



Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).